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## ENTERED

RAW SEQUENCE LISTING DATE: 03/22/2002 PATENT APPLICATION: US/09/966,955A TIME: 14:45:54

Input Set : A:\D029 Sequence Listing.corrected.1.15.01.txt

Output Set: N:\CRF3\03222002\1966955A.raw

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3 <110> APPLICANT: Perez-Villar, Juan J.
 4
         Chang, Han
 5
         Yang, Wen-Pin
 6
         Wu, Yuli
 7
         Whitney, Gena S.
         Kanner, Steven B.
10 <120> TITLE OF INVENTION: Identification and Cloning of a Full-length Human
         Clnk-related Gene, MIST (Mast Cell Immunoreceptor
11
12
        Signal Transducer)
14 <130> FILE REFERENCE: 3053-4113US1
16 <140> CURRENT APPLICATION NUMBER: US/09/966,955A
17 <141> CURRENT FILING DATE: 2001-09-28
19 <150> PRIOR APPLICATION NUMBER: 60/237030
20 <151> PRIOR FILING DATE: 2000-09-29
22 <160> NUMBER OF SEQ ID NOS: 52
24 <170> SOFTWARE: PatentIn Ver. 2.1
26 <210> SEQ ID NO: 1
27 <211> LENGTH: 1851
28 <212> TYPE: DNA
29 <213> ORGANISM: HUMAN
31 <220> FEATURE:
32 <223> OTHER INFORMATION: HUMAN FULL-LENGTH MIST CDNA CLONE #8 - NUCLEIC
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35 <400> SEQUENCE: 1
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37 aggtgettet gtetgatetg geteteettg accaetgtae teateaaata gaccaagate 120
38 cccagagtcc aagatcctta caagggggcc agaaagggat gagctttctg aagaagcact 180
39 gatgtaaaat accaggaatt ttgacatcga agaagatttt tgtgatggca gctgggattt 240
40 ggccataatc tagaagacac atggtgaata cagttgcaag tcatttagtc atatttcttg 300
41 ctaaattgct gtgtcttcaa tggctgaatt gaagatccct cttacccgcc aggtgccaag 360
42 aactatgaac aggcagggca atagaaagac aactaaagaa ggatccaacg atttgaaatt 420
43 ccagaactte agtetgeeaa aaaacaggte atggeetege atcaatagtg ccacaggeea 480
44 gtaccagagg atgaacaagc ctcttctaga ctgggaaaga aactttgctg cagtcctgga 540
45 tggagcaaaa ggccacagtg atgatgacta tgatgaccct gagcttcgga tggaagagac 600
46 atggcagtcg attaaaattt taccagcccg gcctataaag gaatctgaat atgcagatac 660
47 acactattic aaggitgcaa tggacactcc ccttccgtta gacaccagga cctctatctc 720
48 cattggacag ccgacctgga acacacagac gaggttggaa agagtggaca aacccatttc 780
49 caaggacgtc agaagccaaa acattaaagg agatgcatcc gtaagaaaga acaagattcc 840
50 tttaccacct cctcggcctc tcataacact tccgaagaag taccaaccct tgcccctga 900
51 geoggagage ageaggeeae etttatetea gagacacace tttecagaag tecagagaat 960
52 gcccagtcag ataagcttaa gggacttaag tgaggtcctt gaagcagaaa aagttcctca 1020
53 taaccagagg aagcctgaat caactcatct gttagaaaac caaaatactc aagagattcc 1080
54 acttgccatt agcagttctt cattcacgac aagcaaccac agtgtgcaaa acagagatca 1140
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Input Set : A:\D029 Sequence Listing.corrected.1.15.01.txt
Output Set: N:\CRF3\03222002\I966955A.raw

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55 tagaggagge atgeageest gtteteetea gagatgeeag eeteeageea getgeageee 1200
56 teacgaaaat atactgeect ataaatacae aagetggaga ceacetttee eeaaaaggte 1260
57 tgatagaaag gatgtccagc acaatgaatg gtacattgga gaatacagcc gccaggcagt 1320
58 ggaagaggca ttcatgaagg agaacaagga tggtagtttc ttggtccgag attgttccac 1380
59 aaaatccaag gaagagccct atgttttggc tgtgttttat gagaacaaag tctacaatgt 1440
60 aaaaatccgc ttcctggaga ggaatcagca gtttgccctg gggacaggac tcagaggaga 1500
61 tgagaagttt gattcagtag aagacatcat cgaacactac aagaattttc ccattatact 1560
62 aattgatggg aaagataaaa ctggggtcca caggaaacag tgtcacctca ctcagccact 1620
63 cocteteace agacacetet tgeetetgta geetggtett tgtgttatet ttggtttact 1680
64 ggattcagcg cttccattgt tttcattgat ttcaaaagtt tattttctgt gccttcaagg 1740
65 gacaactttt ttaactttgg agaaaagaaa aacactctat aacagagagt ggaaaatcac 1800
66 tcacggtttt gaaagttcaa accacagaga aaatatttat aacatgcaaa a
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71 <212> TYPE: PRT
72 <213> ORGANISM: HUMAN
74 <220> FEATURE:
75 <223> OTHER INFORMATION: HUMAN FULL-LENGTH MIST CDNA CLONE #8, TRANSLATED
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78 <400> SEQUENCE: 2
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82 Asn Arg Gln Gly Asn Arg Lys Thr Thr Lys Glu Gly Ser Asn Asp Leu
85 Lys Phe Gln Asn Phe Ser Leu Pro Lys Asn Arg Ser Trp Pro Arg Ile
            35
                                40
88 Asn Ser Ala Thr Gly Gln Tyr Gln Arg Met Asn Lys Pro Leu Leu Asp
91 Trp Glu Arg Asn Phe Ala Ala Val Leu Asp Gly Ala Lys Gly His Ser
                        70
94 Asp Asp Asp Tyr Asp Asp Pro Glu Leu Arg Met Glu Glu Thr Trp Gln
97 Ser Ile Lys Ile Leu Pro Ala Arg Pro Ile Lys Glu Ser Glu Tyr Ala
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                                   105
                                                        110
100 Asp Thr His Tyr Phe Lys Val Ala Met Asp Thr Pro Leu Pro Leu Asp
            115
                                120
                                                     125
103 Thr Arg Thr Ser Ile Ser Ile Gly Gln Pro Thr Trp Asn Thr Gln Thr
104
106 Arg Leu Glu Arg Val Asp Lys Pro Ile Ser Lys Asp Val Arg Ser Gln
107 145
                        150
                                             155
109 Asn Ile Lys Gly Asp Ala Ser Val Arg Lys Asn Lys Ile Pro Leu Pro
110
                    165
                                        170
112 Pro Pro Arg Pro Leu Ile Thr Leu Pro Lys Lys Tyr Gln Pro Leu Pro
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                                    185
                                                         190
115 Pro Glu Pro Glu Ser Ser Arg Pro Pro Leu Ser Gln Arg His Thr Phe
116
            195
                                200
                                                     205
118 Pro Glu Val Gln Arg Met Pro Ser Gln Ile Ser Leu Arg Asp Leu Ser
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121 Glu Val Leu Glu Ala Glu Lys Val Pro His Asn Gln Arg Lys Pro Glu
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Input Set : A:\D029 Sequence Listing.corrected.1.15.01.txt

Output Set: N:\CRF3\03222002\1966955A.raw

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124 Ser Thr His Leu Leu Glu Asn Gln Asn Thr Gln Glu Ile Pro Leu Ala
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127 Ile Ser Ser Ser Ser Phe Thr Thr Ser Asn His Ser Val Gln Asn Arg
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                260
                                    265
                                                         270
130 Asp His Arg Gly Gly Met Gln Pro Cys Ser Pro Gln Arg Cys Gln Pro
            275
                                280
                                                     285
133 Pro Ala Ser Cys Ser Pro His Glu Asn Ile Leu Pro Tyr Lys Tyr Thr
                            295
134
136 Ser Trp Arg Pro Pro Phe Pro Lys Arg Ser Asp Arg Lys Asp Val Gln
139 His Asn Glu Trp Tyr Ile Gly Glu Tyr Ser Arg Gln Ala Val Glu Glu
                    325
                                        330
142 Ala Phe Met Lys Glu Asn Lys Asp Gly Ser Phe Leu Val Arg Asp Cys
                340
                                    345
145 Ser Thr Lys Ser Lys Glu Glu Pro Tyr Val Leu Ala Val Phe Tyr Glu
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            355
                                360
148 Asn Lys Val Tyr Asn Val Lys Ile Arg Phe Leu Glu Arg Asn Gln Gln
                            375
        370
                                                 380
151 Phe Ala Leu Gly Thr Gly Leu Arg Gly Asp Glu Lys Phe Asp Ser Val
                        390
                                            395
154 Glu Asp Ile Ile Glu His Tyr Lys Asn Phe Pro Ile Ile Leu Ile Asp
155
                    405
                                         410
157 Gly Lys Asp Lys Thr Gly Val His Arg Lys Gln Cys His Leu Thr Gln
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160 Pro Leu Pro Leu Thr Arg His Leu Leu Pro Leu
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164 <210> SEQ ID NO: 3
165 <211> LENGTH: 2335
166 <212> TYPE: DNA
167 <213> ORGANISM: HUMAN
169 <220> FEATURE:
170 <223> OTHER INFORMATION: HUMAN MIST SPLICE VARIANT CDNA CLONE #7, NUCLEIC
171
         ACID SEQUENCE
173 <400> SEQUENCE: 3
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175 caggaggttt tetgetgaag ggeactgett ageategaga agaatteaac ceacegeett 120
176 actaatttee agtgeeceaa ggtetetgea etgeegeece teeteacagg agaeggaeae 180
177 ctcagcctag atcccttggt gctctccacg ctgttcaggc tgaattgaag atccctctta 240
178 cccgccaggt gccaagaact atgaacaggc agggcaatag aaagacaact aaagaaggat 300
179 ccaacgattt gaaattccag aacttcagtc tgccaaaaaa caggtcatgg cctcgcatca 360
180 atagtgccac aggccagtac cagaggatga acaaqcctct tctagactgg gaaaqaaact 420
181 ttgctgcagt cctggatgga gcaaaaggcc acagtgatga tgactatgat gaccctgagc 480
182 ttcggatgga agagacatgg cagtcgatta aaattttacc agcccggcct ataaaggaat 540
183 ctgaatatgc agatacacac tatttcaagg ttgcaatgga cactcccctt ccgttagaca 600
184 ccaggacctc tatctccatt ggacagccga cctggaacac acagacgagg ttggaaagag 660
185 tggacaaacc catttccaag gacgtcagaa gccaaaacat taaaggagat gcatccgtaa 720
186 gaaagaacaa gatteettta eeaceteete ggeeteteat aacaetteeg aagaagtaee 780
187 aaccettgee eeetgageeg gagageagea ggeeacettt ateteagaga cacacettte 840
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188 cagaagtcca gagaatgccc agtcagataa gcttaaggga cttaagtgag gtccttgaag 900
189 cagaaaaagt tootoataac cagaggaago otgaatcaac toatotgtta gaaaaccaaa 960
190 atactcaaga gattccactt gccattagca gttcttcatt cacgacaagc aaccacagtg 1020
191 tgcaaaacag agatcataga ggaggcatgc agccctgttc tcctcagaga tgccaqcctc 1080
192 cagceagetg cageeeteae gaaaatatae tgeeetataa atacacaage tggagaceae 1140
193 ctttccccaa aaggtctgat agaaaggatg tccagcacaa tgaatggtac attggagaat 1200
194 acagccgcca ggcagtggaa gaggcattca tgaaggagaa caaggatggt agtttcttgg 1260
195 teegagattg tteeacaaaa teeaaggaag ageeetatgt tttggetgtg ttttatgaga 1320
196 acaaagtcta caatgtaaaa atccgcttcc tggagaggaa tcagcagttt gccctgggga 1380
197 caggactcag aggagatgag aagtttgatt cagtagaaga catcatcgaa cactacaaga 1440
198 attttcccat tatactaatt gatgggaaag ataaaactgg ggtccacagg aaacagtgtc 1500
199 acctcactca gccactccct ctcaccagac acctcttgcc tctgtagcct ggtctttgtg 1560
200 ttatctttgg tttactggat tcagcgcttc cattgttttc attgatttca aaagtttatt 1620
201 ttctgtgcct tcaagggaca acttttttaa ctttggagaa aagaaaaaca ctctataaca 1680
202 gagagtggaa aatcactcac ggttttgaaa gttcaaacca cagagaaaat atttataaca 1740
203 tgcaaaaaat aaaaacatto tagtaactgg ccactggaaa ataaataaaa ataaaaacta 1800
204 gggttttaaa agtatettet aaaaaacaac aacaaaaaat actataaaca tageeattat 1860
205 geteatgata eaggegagea geaaagggea eeagaagetg ttgettaaat gtttgeagte 1920
206 agtgcaagac aagtetatgg gaaatteeca aatetgtget etttacagga caetgegetg 1980
207 cetttatgte agttgttggg cettacatat atacaatgtg tggatgattt ettacactaa 2040
208 agatgctggg ctgggtgcgg tgcctcatgc ctgtaatccc agcactttgg gaggctgagg 2100
209 tggacagatc acgaggtcag gagatcaaga ccatcctggc taacatggtg aaaccccatg 2160
210 tctactaaaa atacaaaaaa tcagctgggc gtggtggtgg gtgcctgtag tcccagctac 2220
211 tcgggaggct gaggcaggag aatggtgtga acccgggagg cggagcttgc agtgagccga 2280
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217 <212> TYPE: PRT
218 <213> ORGANISM: HUMAN
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                 20
                                     25
231 Ile Asn Ser Ala Thr Gly Gln Tyr Gln Arg Met Asn Lys Pro Leu Leu
232
234 Asp Trp Glu Arg Asn Phe Ala Ala Val Leu Asp Gly Ala Lys Gly His
235
                             55
237 Ser Asp Asp Asp Tyr Asp Asp Pro Glu Leu Arg Met Glu Glu Thr Trp
240 Gln Ser Ile Lys Ile Leu Pro Ala Arg Pro Ile Lys Glu Ser Glu Tyr
241
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243 Ala Asp Thr His Tyr Phe Lys Val Ala Met Asp Thr Pro Leu Pro Leu
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                                    105
                                                        110
246 Asp Thr Arg Thr Ser Ile Ser Ile Gly Gln Pro Thr Trp Asn Thr Gln
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Input Set : A:\D029 Sequence Listing.corrected.1.15.01.txt
Output Set: N:\CRF3\03222002\I966955A.raw

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249 Thr Arg Leu Glu Arg Val Asp Lys Pro Ile Ser Lys Asp Val Arg Ser
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252 Gln Asn Ile Lys Gly Asp Ala Ser Val Arg Lys Asn Lys Ile Pro Leu
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255 Pro Pro Pro Arg Pro Leu Ile Thr Leu Pro Lys Lys Tyr Gln Pro Leu
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                                         170
258 Pro Pro Glu Pro Glu Ser Ser Arg Pro Pro Leu Ser Gln Arg His Thr
                                     185
261 Phe Pro Glu Val Gln Arg Met Pro Ser Gln Ile Ser Leu Arg Asp Leu
262
            195
                                200
264 Ser Glu Val Leu Glu Ala Glu Lys Val Pro His Asn Gln Arg Lys Pro
                            215
267 Glu Ser Thr His Leu Leu Glu Asn Gln Asn Thr Gln Glu Ile Pro Leu
268 225
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                                             235
270 Ala Ile Ser Ser Ser Phe Thr Thr Ser Asn His Ser Val Gln Asn
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273 Arg Asp His Arg Gly Gly Met Gln Pro Cys Ser Pro Gln Arg Cys Gln
274
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                                    265
276 Pro Pro Ala Ser Cys Ser Pro His Glu Asn Ile Leu Pro Tyr Lys Tyr
277
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                                                     285
279 Thr Ser Trp Arg Pro Pro Phe Pro Lys Arg Ser Asp Arg Lys Asp Val
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282 Gln His Asn Glu Trp Tyr Ile Gly Glu Tyr Ser Arg Gln Ala Val Glu
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285 Glu Ala Phe Met Lys Glu Asn Lys Asp Gly Ser Phe Leu Val Arg Asp
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288 Cys Ser Thr Lys Ser Lys Glu Glu Pro Tyr Val Leu Ala Val Phe Tyr
289
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291 Glu Asn Lys Val Tyr Asn Val Lys Ile Arg Phe Leu Glu Arg Asn Gln
            355
                                360
294 Gln Phe Ala Leu Gly Thr Gly Leu Arg Gly Asp Glu Lys Phe Asp Ser
295
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297 Val Glu Asp Ile Ile Glu His Tyr Lys Asn Phe Pro Ile Ile Leu Ile
298 385
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                                            395
300 Asp Gly Lys Asp Lys Thr Gly Val His Arg Lys Gln Cys His Leu Thr
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308 <211> LENGTH: 2540
309 <212> TYPE: DNA
310 <213> ORGANISM: HUMAN
312 <220> FEATURE:
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319 caagggggcc agaaagggat gagctttctg aagaagcact gatgtaaaat accaggaatt 180
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/966,955A

DATE: 03/22/2002 TIME: 14:45:56

Input Set : A:\D029 Sequence Listing.corrected.1.15.01.txt

Output Set: N:\CRF3\03222002\1966955A.raw